

REMARKS

Claims 1-22 have been examined. Claim 5 has been cancelled. Claims 1-4 and 6-22 remain in the Application. The United States Patent and Trademark Office (USPTO) rejects claims 14 and 19 under 35 U.S.C. § 112, second paragraph. Claims 1-4, 6, 7, 9-11, 13-15, 18, and 20 are rejected under 35 U.S.C. § 102(e). Claims 5, 12, and 19 are rejected under 35 U.S.C. § 103(a).

A. 35 U.S.C. § 112, Second Paragraph: Rejection of Claims 14 and 19

The USPTO rejects claims 14 and 19 under 35 U.S.C. § 112, second paragraph, as indefinite. Applicants amended claims 14 and 19 to address the specific concerns raised by the Examiner. Applicants respectfully request that the Examiner withdraw the rejection to claims 14 and 19 under 35 U.S.C. § 112, second paragraph.

B. 35 U.S.C. § 102(e): Rejection of Claims 1-4, 6, 7, 9-11, 13-15, 18, and 20

The Examiner rejects claims 1-4, 6, 7, 9-11, 13-15, 18, and 20 under 35 U.S.C. § 102(e) as anticipated by U.S. Patent No. 6,068,787, issued to Grumbine et al. ("*Grumbine*"). *Grumbine* merely discloses a composition for a slurry that includes hydrogen peroxide. *Grumbine*, col. 10, line 49. Nowhere in *Grumbine* does it teach introducing a second agent comprising hydrogen peroxide "after polishing a metal layer" as in claim 1, line 5. Since each and every limitation of claim 1 is not disclosed in *Grumbine*, Applicants respectfully request withdrawal of the rejection to claim 1 under 35 U.S.C. § 102(e). Since claims 2-4 and 6-7 depend from claim 1, claims 2-4 and 6-7 have at least the limitations of claim 1. Therefore, claims 2-4 and 6-7 are also not anticipated by *Grumbine* under 35 U.S.C. § 102(e). Withdrawal of the rejection under 35 U.S.C. § 102(e) to claims 2-4 and 6-7 is also respectfully requested.

Independent claim 9 is also not anticipated by *Grumbine*. Claim 9 includes "after polishing the metal layer, rinsing the substrate with a solution comprising hydrogen peroxide." Claim 9, line 5. Since *Grumbine* does not disclose "after polishing the metal layer, rinsing the substrate with a solution comprising hydrogen peroxide", claim 9 is not anticipated by *Grumbine*. Claims 10-11 and 13-15 are also

not anticipated by *Grumbine* since these claims depend from claim 9 and have at least the limitations of claim 9. Withdrawal of the rejection to claims 9-11 and 13-15 is respectfully requested.

Independent claim 18 is also not anticipated by *Grumbine*. Claim 18 includes "after polishing the metal layer, introducing a rinsing solution onto a metal plug, the rinsing solution comprising hydrogen peroxide." Claim 18, lines 4-5. *Grumbine* does not disclose "after polishing the metal layer, introducing a rinsing solution onto a metal plug, the rinsing solution comprising hydrogen peroxide". Therefore, claim 18 is not anticipated by *Grumbine*. Since claim 20 depends from claim 18, claim 20 has at least the limitations of claim 18; therefore, claim 20 is also not anticipated by *Grumbine*. Withdrawal of the rejection under 35 U.S.C. § 102(e) to claims 18 and 20 is requested.

C. 35 U.S.C. § 103(a): Rejection of Claims 5, 8, 12, 16-17, 19, 21, and 22

1. Grumbine

The USPTO rejects claims 5, 12, and 19 under 35 U.S.C. § 103(a) as unpatentable over *Grumbine* and that which is "within the scope of one of ordinary skill in the arts to employ slurries containing hydrogen peroxide subsequent to another slurry to achieve respective portions of the polishing step." Office Action dated July 5, 2000, p. 3. Claims 12 and 16-17 depend from independent claim 9, claims 12 and 16-17 have at least the limitations of claim 9. Therefore, claims 5, 12, and 19 are also not obvious based upon *Grumbine*. Withdrawal of the rejection under 35 U.S.C. § 102(e) to claims 5, 12, and 19 is requested.

2. Grumbine in view of Robinson

The Examiner rejects claims 8, 16, 17, 21, and 22 under 35 U.S.C. § 103(a) as being unpatentable over *Grumbine* and further in view of U.S. Patent No. 5,990,012 issued to Robinson et al. ("*Robinson*"). *Robinson* teaches a polishing pad having a plurality of structures external to the polishing pad for polishing a substrate. A chemical polishing solution is introduced onto the polishing pad and the substrate.

Robinson fails to teach or suggest rinsing a substrate with a solution comprising hydrogen peroxide. Therefore, Applicants respectfully submit that independent claims 1, 9 and 19 are not obvious based upon *Grumbine* in view of *Robinson*. Since claims 5 and 8 depend from claim 1, these claims have at least the limitations of claim 1. Therefore, claims 5 and 8 are not obvious. Moreover, since claims 12 and 16-17 depend from claim 9, these claims have at least the limitations of claim 9; therefore, claims 12 and 16-17 are also not obvious. Additionally, claims 19, 21, and 22 depend from claim 18 and have at least the limitations of claim 18; therefore, claims 19, 21, and 22 are not obvious. Withdrawal of the rejection under 35 U.S.C. § 103(a) to claims 8, 16, 17, 21, and 22 is respectfully requested.

CONCLUSION

In view of the foregoing, it is believed that all claims now pending are now in condition for allowance and such action is earnestly solicited at the earliest possible date. If there are any fees due in connection with the filing of this response, please charge those fees to our Deposit Account No. 02-2666. If a fee is required for an extension of time under 37 C.F.R. § 1.136 and is not accounted for above, such an extension is requested and the fee should also be charged to our Deposit Account. If a telephone interview would expedite the prosecution of this Application, the Examiner is invited to contact the undersigned at (310) 207-3800.

Respectfully submitted,

BLAKELY SOKOLOFF, TAYLOR & ZAFMAN LLP

Dated: 10/5/00

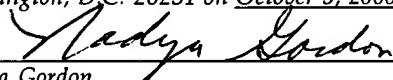
By: 

Carol F. Barry; Reg. No. 41,600

12400 Wilshire Boulevard
Seventh Floor
Los Angeles, California 90025
(310) 207-3800

CERTIFICATE OF MAILING:

I hereby certify that this correspondence is being deposited as First Class Mail with the United States Postal Service in an envelope addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231 on October 5, 2000.

 10/5/00
Nadya Gordon Date